PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P17125WO	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/SE2003/000020	International filing date *(day/month/year)* 09-01-2003	Priority date *(day/month/year)* – – –
International Patent Classification (IPC) or national classification and IPC H04L 29/06, H04L 12/64, H04Q 7/38		
Applicant Telefonaktiebolaget LM Ericsson (publ) et al.		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of __5__ sheets, including this cover sheet.

3. This report is also accompanied by ANNEXES, comprising:

   a. ☐ *(sent to the applicant and to the International Bureau)* a total of _____ sheets, as follows:

      ☐ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).

      ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.

   b. ☐ *(sent to the International Bureau only)* a total of (indicate type and number of electronic carrier(s))

      _____ , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

   ☒ Box No. I   Basis of the report

   ☐ Box No. II   Priority

   ☐ Box No. III   Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

   ☐ Box No. IV   Lack of unity of invention

   ☒ Box No. V   Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

   ☐ Box No. VI   Certain documents cited

   ☐ Box No. VII   Certain defects in the international application

   ☐ Box No. VIII   Certain observations on the international application

Date of submission of the demand 07-07-2004	Date of completion of this report 21-03-2005
Name and mailing address of the IPEA/SE Patent- och registreringsverket Box 5055 S-102 42 STOCKHOLM Facsimile No. +46 8 667 72 88	Authorized officer Roger Bou Faisal /LR Telephone No. +46 8 782 25 00

Form PCT/IPEA/409 (cover sheet) (January 2004)

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/SE2003/000020

Box No. I	Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This report is based on a translation from the original language into the following language _____ , which is the language of a translation furnished for the purposes of:

☐ international search (under Rules 12.3 and 23.1(b))

☐ publication of the international application (under Rule 12.4)

☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

☒ the international application as originally filed/furnished

☐ the description:

pages _____ as originally filed/furnished

pages* _____ received by this Authority on _____

pages* _____ received by this Authority on _____

☐ the claims:

pages _____ as originally filed/furnished

pages* _____ as amended (together with any statement) under Article 19

pages* _____ received by this Authority on _____

pages* _____ received by this Authority on _____

☐ the drawings:

pages _____ as originally filed/furnished

pages* _____ received by this Authority on _____

pages* _____ received by this Authority on _____

☐ a sequence listing and/or any related table(s) -- see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

☐ the description, pages _____

☐ the claims, Nos. _____

☐ the drawings, sheets/figs _____

☐ the sequence listing *(specify)*: _____

☐ any table(s) related to the sequence listing *(specify)*: _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

☐ the description, pages _____

☐ the claims, Nos. _____

☐ the drawings, sheets/figs _____

☐ the sequence listing *(specify)*: _____

☐ any table(s) related to the sequence listing *(specify)*: _____

* *If item 4 applies, some or all of those sheets may be marked "superseded."*

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-14	YES
	Claims		NO
Inventive step (IS)	Claims	1-14	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-14	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

The present invention is concerned with a problem of controlling the codec selection in an MCS (Multimedia Controller Server), controlling multimedia communications in a telecommunication system that comprises a plurality of interconnected physical networks offering different bandwidth capacity for a communication established through them.

The problem is solved in the following manner. When a multimedia communication between endpoints is received in the MCS, the method and apparatus according to the invention allow to detect whether there are bandwidth limitations due to the bandwidth capacity of the various physical networks said communication will traverse, and then, to control what codec(s) are selected that can be used for said communication based on information concerning said bandwidth capacity.

Reference is made to the following documents:
D1: WO 02054706, A1
D2: EP 1079573, A2

Document D1 is considered to represent the closest prior art. The invention in D1 provides a solution for alleviating problems related to operation and administration of multi-user application programs, particularly real-time applications, in systems of networked computers by means of a novel feature, implemented as an enhancement of a selected call control protocol, such as the H.323 or SIP protocol. Each client, server, Gatekeeper and optional firewall means of a system according to invention is provided with a specific real-time codec with a common interface adapted to a multimedia call

.../...

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of: Box V

control protocol, such as H.323 or SIP, the codec being adapted to co-operate with each of said means. Thus, each client means is allowed to use its data communication protocol of choice without the need for the same data communication protocol choice on the server side of the application (abstract; page 1, line 12- page 4, line 14; and claims 1-14).

The invention according to independent claims 1 and 8 differs from the method in D1 by storing information related to at least one funnel (limiting) network element that links said first and second physical network and by that the selection of advertised codec is performed in dependence of the address of said funnel network element. Also, in D1, one and the same codec is used for all clients independently of the network. Only the new, specific codec is pointed out and no selection takes place. Additionally, D1 is silent in the question concerning different routes that can be used for a connection through the physical networks.

Due to these features, the codec(s) is chosen dependent on the real bandwidth capacity and an effective codec(s) selection procedure is achieved.

Consequently, with the background of D1, the problem is to detect and address the network element that mostly limits the bandwidth of a communication established through it.

A solution to a similar problem is known from document D2, which describes a system including means for selecting one or more of a plurality of resource elements as candidates for use in the requested call in response to the call request based on usage information of the data network, wherein the selecting includes selecting one or more codecs as candidates for use in each network terminal.

However, in D2 only one common network is disclosed. Also D2 does not disclose funnel elements for different routes and does not disclose selection of codecs in dependence on different funnel elements between different physical networks.

Using the prior art of D1 as a starting point, a person skilled in the art trying to solve the problem stated above, would not with the teachings of D2, reach the claimed invention according to the independent claims 1 and 8.

.../...

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY	International application No.
	PCT/SE2003/000020

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: Box V

Thus the invention according to claims 1-14 is novel, is considered to involve an inventive step. It is also industrial applicable.